**IN THE UNITED STATES DISTRICT COURT**
**EASTERN DISTRICT OF MICHIGAN**
**SOUTHERN DIVISION**

| | |
|---|---|
| CHOON'S DESIGN LLC,<br><br>Plaintiff,<br><br>v.<br><br>ANHETOY *et al.*,<br><br>Defendants. | Case No. 4:22-cv-12963-FKB-APP<br><br>Hon. F. Kay Behm<br>Mag. Anthony P. Patti |

**OPINION AND ORDER CONSTRUING DISPUTED CLAIM TERMS**

This is a patent and trademark infringement case in which Plaintiff Choon's Design LLC ("Choon's Design") alleges that dozens of online sellers from China (identified by their ecommerce store names in Exhibit 1 to the Complaint (collectively, "Defendants")) are flooding the online marketplace with rubber band crafting kits that infringe Choon's Design's patent and Rainbow Loom® brand.

Choon's Design filed this case on December 7, 2022, alleging, *inter alia*, that Defendants infringe U.S. Patent No. 8,899,631 (the "'631 Patent"). ECF No. 1. Pursuant to the Court's Scheduling Order, the parties were to identify the disputed claim terms within the '631 Patent that they feel are material to the infringement

and validity issues in this case. Choon's Design and two groups of Defendants[1] have submitted briefs explaining their positions on how the disputed claim terms should be construed.[2] The Court held oral argument on January 29, 2025. In this Opinion and Order, the Court will construe the disputed claim terms identified by the parties, pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996).

## I. BACKGROUND

This case involves do-it-yourself rubber band crafting kits for making uniquely colored bracelets, necklaces, and other trinkets from colorful rubber bands. As distinguished from kits that only provide raw materials, the kits come with tools to help users of all skill levels manipulate the rubber bands to form a series of links.

[1] The two groups of Defendants are: (1) EasyBuy–US, Funzbo, Big Totoro, and Yyds11 ("First Group"); and (2) Hzbhllx, Jming, Yczl, and Xtieksh ("Second Group"). All other Defendants are either in default or have settled.

[2] *See* Choon's Design's Opening *Markman* Brief (ECF No. 126); First Group's Response Brief (ECF No. 134); Second Group's Response Brief (ECF No. 139); Choon's Design's Reply Brief (ECF No. 142).

### A. The '631 Patent

The '631 Patent, entitled "Brunnian Link Making Device and Kit," was filed in the United States Patent and Trademark Office (the "USPTO") on September 25, 2012 and issued on December 2, 2014.[3]

The '631 Patent is directed to a kit that includes a "template," known in the marketplace as a "mini-loom," and "C-Clips," referring to their C-shaped design. In the marketplace for rubber band crafting kits, the template is a handheld part with two spaced apart pins particularly suitable for making rubber band bracelets.

As shown in Figure 1, reproduced below, the kit (10) includes elastic bands (18), a template (12 or 15) for supporting the elastic bands (18), a hook (14) for manipulating the elastic bands (18), and clips (16) for securing the elastic bands (18) on the ends of the completed series of links. For a basic understanding of how the linking process works, Figure 9H, reproduced below, illustrates that after placing one elastic band (18) on the template (12), the hook (14) can be used to loop another elastic band (18) through the one on the template (12).

[3] At the time the parties filed their *Markman* briefs, a reexamination proceeding initiated by a third party was pending at the USPTO. On December 11, 2024, the USPTO issued a reexamination certificate confirming the novelty and non-obviousness of the claims of the '631 Patent, with minor amendments not material to the disputed issues of claim construction raised by the parties. *Ex Parte* Reexamination Certificate No. 8,899,631 C1.

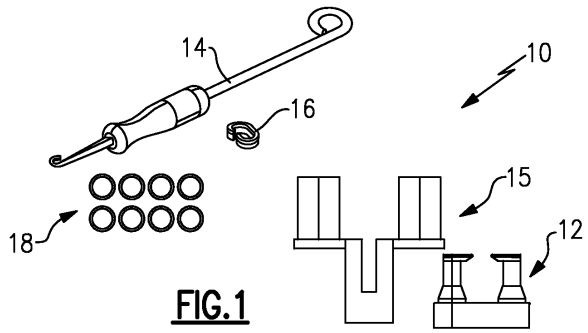



FIG.1

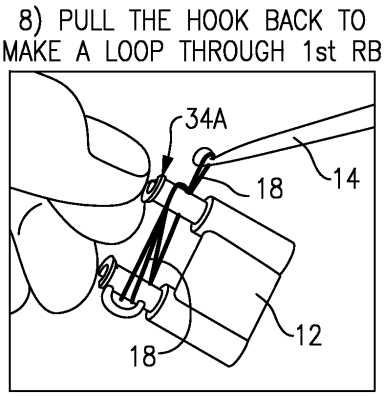



FIG.9H

The '631 Patent discloses three embodiments of a template.[4] As shown in Figures 4-6, reproduced below, in the first embodiment, the template (12) includes two pins (28A, 28B) connected by a bridge (36) that defines the distance (52) between the pins (28A, 28B). Each pin (28A, 28B) includes an upper flange (30A, 30B) and a lower base (32A, 32B) opposed about a center barrel portion (40A, 40B), and an access groove (34A, 34B) extending through the pin (28A, 28B). The bridge (36) extends between the bases (32A, 32B) of the pins (28A, 28B), and the pins (28A, 28B) are connected by the bridge (36) at the bases (32A, 32B). The barrel portions (40A, 40B) support the elastic bands (18), and the flanges (30A, 30B) and the bases (32A, 32B) extend outwardly from the barrel portions (40A, 40B) to prevent the elastic bands (18) from sliding off the pins (28A, 28B). The access

[4] The embodiments are respectively shown in Figures 4-6, Figures 9A-9K, and Figures 10-12. The Court notes that the written description is organized around two main embodiments, the "template 12" discussed with reference to both Figures 4-6 and Figures 9A-9K, and the "template 15" discussed with reference to Figures 10-12. However, as to the "template 12," it is apparent that the part illustrated in Figures 9A-9K is different from the part illustrated in Figures 4-6, particularly with respect to the way the pins are connected.

grooves (34A, 34B) are disposed on outward facing sides (38A, 38B) of the template (12), and allow the hook (14) to reach into the pins (28A, 28B) behind the elastic bands (18).

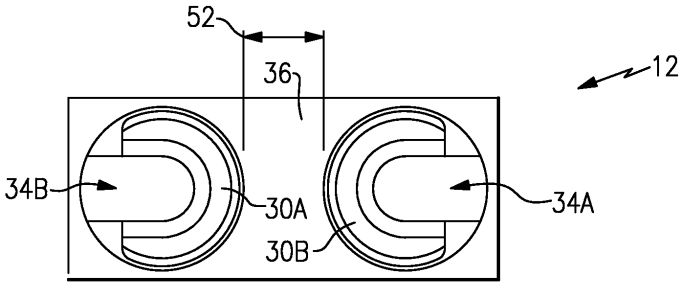



FIG.6

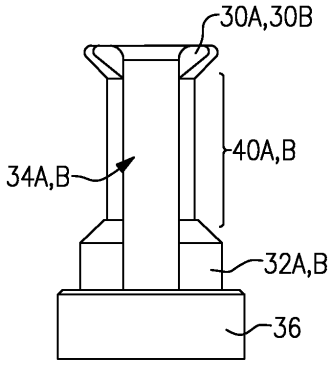



FIG.5

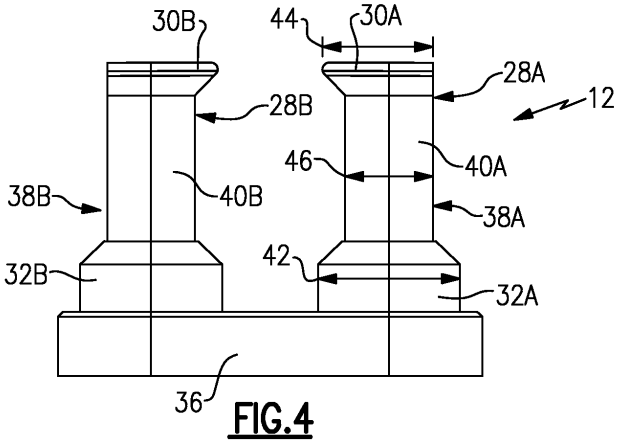



FIG.4

With respect to the remaining embodiments, the Court notes that the written description is generally limited to referring to the figures and naming the numbered features. As shown with additional reference to Figure 9A, reproduced below, in the second embodiment, the template (12) includes two pins (28A, 28B) connected by an unnumbered bridge. Similar to the first embodiment, each pin (28A, 28B) includes an access groove (34). Moreover, it can be seen that each pin (28A, 28B) includes an unnumbered upper flange and an unnumbered lower base. On the other

hand, the two parts are different with respect to the relationship between the pins and the bridge. In the first embodiment, the bridge (36) is disposed under the pins (28A, 28B), and connected with the bottoms of the bases (32A, 32B). In the second embodiment, the pins (28A, 28B) have taller bases, and the bridge is disposed between the pins (28A, 28B), and connected along the sides of the bases.

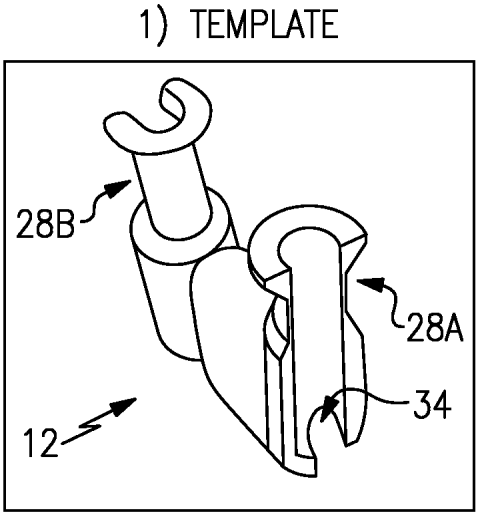



FIG.9A

As shown in Figures 10-12, reproduced below, in the third embodiment, the template (15) includes two pins (21) supported on a holder (17). Each pin (21) includes a first end (23) and a base end (27), and arms (19) disposed on either side of an access groove (25). Moreover, it can be seen that the holder (17) includes an upper bridge portion. In the third embodiment, the bridge portion is disposed between the pins (21), and connected with both the base ends (27) and the arms (19).

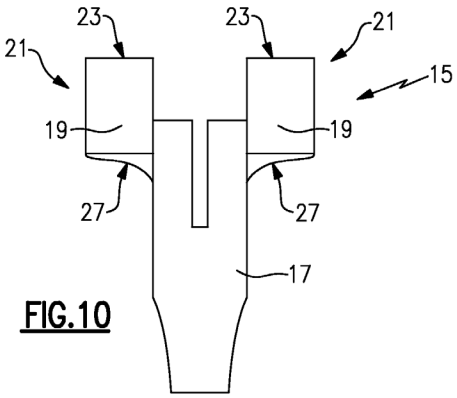



FIG.10

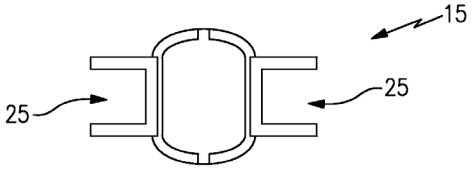



FIG.11

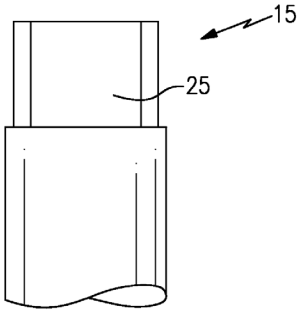



FIG.12

In addition to the embodiments of a template, the ’631 Patent discloses one embodiment of a clip. As shown in Figures 7 and 8, reproduced below, the clip (16) is C-shaped, and includes inward facing ends (48). In association with the C-shaped design, the clip (16) defines an interior space (50) for receiving the elastic bands (18). The inward facing ends (48) are disposed on each side of an opening to the interior space (50), and prevent the elastic bands (18) from sliding out from the interior space (50) through the opening off the clip (16).[5]

[5] For purposes of discussion, the Court adopts the “interior space” and “opening” terminology from the claims. For reference, in connection with the clip as a whole, the written description variously uses “open space 50,” “inner area 50,” and “open area 50,” while the claims consistently use “interior space.” In connection with the inward facing ends, as implied by the lack of a reference number, “opening” appears only in the claims.

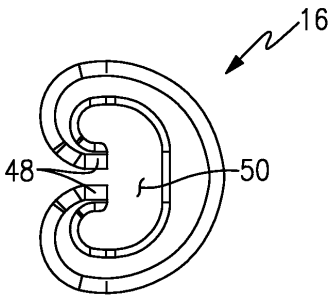



FIG.7

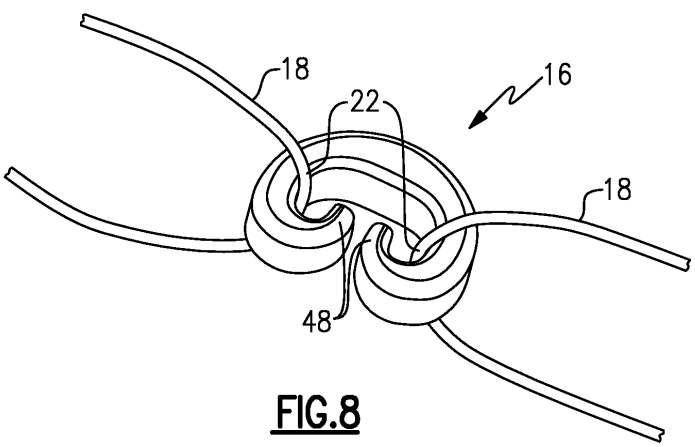



FIG.8

### B. Infringement Allegations

As set forth in its Infringement Contentions, Choon's Design alleges that all Defendants infringe Claims 4, 10, 13-15, 20, and 24 of the '631 Patent (the "asserted claims") in connection with online sales of rubber band crafting kits with handheld mini-looms (the "accused mini-loom kits"). ECF No. 120.

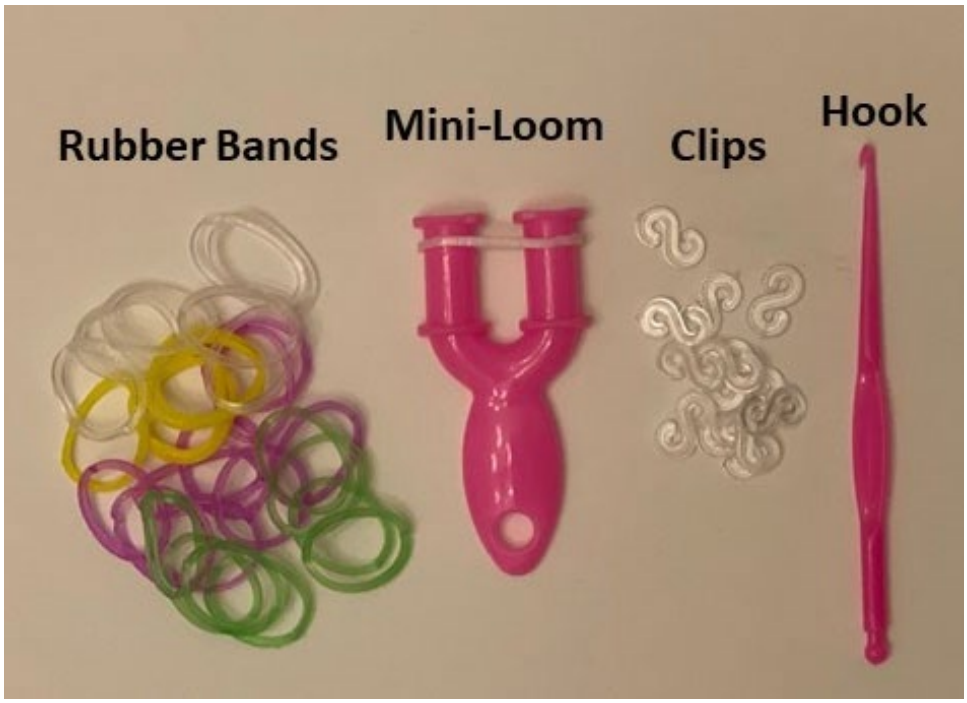
The asserted claims include independent Claim 4 and dependent Claim 24, and independent Claim 10 and dependent Claims 13-15 and 20. Independent Claims 4 and 10 recite:

> **4**. The [*sic*] device for creating an item consisting of a series of links, the device comprising:
>
> a template including at least two pins spaced part [*sic*] from each other, each of the pins including a first end, a base end, and an access groove; and
>
> a bridge portion extending between the base end of each of the pins, wherein the first end includes an outwardly extending flange and each of the access grooves extend entirely through each of the pins including the first end and the base end.

> **10**. A kit for creating an item consisting of a series of links, the kit comprising:
>
> a template including at least two pins spaced apart from each other, each of the pins including a first end, a base end, and an access groove; and
>
> at least one clip including inward facing ends for securing ends of the series of links together.

'631 Patent 4:1-11 (Claim 4), 4:41-47 (Claim 10).

Choon's Design's infringement allegations are directed to representative components of the accused mini-loom kits sold by all Defendants. As shown in Choon's Design's image of the representative components, reproduced below, in addition to rubber bands and one or more hooks, the accused mini-loom kits contain one or more mini-looms and clips. ECF No. 1, PageID.13. The representative accused mini-loom is a Y-shaped part known as a "Y-Loom" (or "Y-Tool"), and the representative accused clips are "S-Clips" with an S-shaped design.




## II. LAW OF CLAIM CONSTRUCTION

The proper construction of disputed claim terms is a question of law reserved to courts. *Markman*, 517 U.S. at 372, 391.

The claims of a patent are short and concise statements, expressed with great formality, of the metes and bounds of the patent invention. Each claim is written in the form of a single sentence. Claim construction is the manner in which courts determine the meaning of a disputed term in a claim. "The construction of claims is simply a way of elaborating the normally terse claim language: in order to understand and explain, but not to change, the scope of the claim." *Scripps Clinic & Research Found. v. Genentech, Inc.*, 927 F.2d 1565, 1580 (Fed. Cir. 1991), *overruled in part on other grounds by Abbott Labs. v. Sandoz, Inc.*, 566 F.3d 1282, 1293 (Fed. Cir. 2009) (*en banc*). The construction of key terms in patent claims

plays a critical role in nearly every patent infringement case. Claim construction is central to both a determination of infringement and validity of a patent. The judge, not a jury, is to determine the meaning of the disputed claim terms as a matter of law. *Markman*, 517 U.S. at 372, 391.

A court has two primary goals in construing the disputed claim terms. The first goal is to determine the scope of the patented invention by interpreting the disputed claim terms to the extent needed to resolve the dispute between the parties. The second goal is to provide a construction that will be understood by the jury, which might otherwise misunderstand a claim term in the context of the patent specification and prosecution history of the patent. *See*, *e.g.*, *Power-One, Inc. v. Artesyn Techs., Inc.*, 599 F.3d 1343, 1348 (Fed. Cir. 2010) ("The terms, as construed by the court, must ensure that the jury fully understands the court's claim construction rulings and what the patentee covered by the claims."); *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) ("Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary, to explain what the patentee covered by the claims, for use in the determination of infringement."). The Court's claim construction ruling forms the basis for the ultimate jury instructions, although that is not to say that the Court cannot modify its wording for the jury instructions after ruling on claim

construction. *See IPPV Enters., LLC v. Echostar Commc'ns Corp.*, 106 F. Supp. 2d 595, 601 (D. Del. 2000).

The seminal case setting forth the principles for construing disputed claim terms is *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*). According to *Phillips*, the words of the claim are generally given their "ordinary and customary" meaning, i.e., "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Id.* at 1312-13. The person of ordinary skill in the art views the claim term in light of the entire intrinsic record, which is the entire claim, the other parts of the patent, and, if in evidence, the prosecution history of the patent before the USPTO. *Id.* at 1313-14. Although a claim must be construed in view of the entire patent, the court should normally not read limitations or features of the exemplary embodiments discussed in the patent specification into the claims. *Id.* at 1323-24.

The prosecution history of the patent can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention during the course of prosecution by his statements, making the claim scope narrower than it would otherwise be. However, because the prosecution history is an ongoing negotiation between the patent office and the patent owner, rather than the final product of that negotiation, it often lacks

the clarity of the patent itself and is generally less useful for claim construction purposes. *Id.* at 1317.

In discerning the meaning of claim terms, resorting to dictionaries and treatises also may be helpful. *Id.* at 1320-23. However, undue reliance on extrinsic evidence poses the risk that it will be used to change the meaning of claims in derogation of the indisputable public records consisting of the claims, the specification of the patent and the prosecution history, thereby undermining the public notice function of patents. *Id.* In the end, the construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be the correct construction. *Id.* at 1316.

It is proper for a court to construe the disputed claim terms in the context of the infringement or invalidity dispute by viewing the accused device or prior art. Viewing the accused device or prior art allows the court to construe the claims in the context of the dispute between the parties, not in the abstract. "While a trial court should certainly not prejudge the ultimate infringement analysis by construing claims with an aim to include or exclude an accused product or process, knowledge of that product or process provides meaningful context for the first step of the infringement analysis, claim construction." *Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d 1322, 1326-27 (Fed. Cir. 2006). The Federal Circuit has held that without "the vital contextual knowledge of the accused

products," a court's claim construction decision "takes on the attributes of something akin to an advisory opinion." *Lava Trading, Inc. v. Sonic Trading Mgmt., LLC*, 445 F.3d 1348, 1350 (Fed. Cir. 2006).

## III. CLAIM CONSTRUCTION ANALYSIS

In their *Markman* briefs, the parties request that the Court construe five terms in independent Claims 4 and 10 of the '631 Patent, one directed to the clip, and four directed to the template: (i) "clip including inward facing ends" in Claim 10; (ii) "base end" in Claims 4 and 10; (iii) "bridge portion" in Claim 4; (iv) "each of the pins including a first end, a base end" in Claims 4 and 10; and (v) "each of the pins including a first end, a base end, and an access groove" in Claims 4 and 10.

Below, the Court will address the proper constructions of the disputed claim terms.

### A. "Clip Including Inward Facing Ends" (Claim 10)

| Disputed Term | Choon's Design's Proposed Construction | Defendants' Proposed Construction | Court's Construction |
|---|---|---|---|
| "clip including inward facing ends" (Claim 10) | Plain and ordinary meaning, which is: "connector with ends that face inward" | First Group: "a connector that has a pair of ends that point in the same direction, inwardly to a single open space | "connector with ends that face inward toward where ends of the series of links are kept" |

| | | | |
|---|---|---|---|
| | | defined in part by the pair of ends"<br><br>Second Group: "a connector having two ends, the ends substantially defining a single interior space between them," or "a clip having a single opening and inward facing ends disposed on each side of that opening" | |

The parties request that the Court construe the term "clip including inward facing ends" in Claim 10 of the '631 Patent. For reference, the term appears in the claim language reciting:

> **10**. A kit for creating an item consisting of a series of links, the kit comprising:
> …
> at least one **clip including inward facing ends** for securing ends of the series of links together.

'631 Patent 4:41-47 (Claim 10) (emphasis added). The dispute between the parties concerns whether the term needs construction to clarify what the ends face inward to, and, if so, whether to impose what can be referred to as a "single opening" limitation.

Some background is necessary to understand the issues. The '631 Patent is part of a patent family including, in relevant part: (1) a parent patent, U.S. Patent No. 8,485,565 (the "'565 Patent") and (2) a sibling patent, U.S. Patent No. 8,622,441 (the "'441 Patent"). The '631 Patent, like the '565 Patent and the '441 Patent, discloses only a single embodiment of a clip.[6] In the written description, the '631 Patent introduces the disclosed clip as (a) being C-shaped and (b) including the inward facing ends. Correspondingly, the '631 Patent describes the inward facing ends with reference to the single interior space associated with the C-shaped design. As stated in the written description:

> Referring to FIGS. 7 and 8, the example clip 16 is generally C-shaped with inwardly facing ends 48. The inwardly facing ends 48 point inwardly to an open space 50 where parts of the elastic members are kept 18 [*sic*]. The inwardly facing ends 48 prevent ends 22 from sliding out from the inner area 50 off of the clip 16.

'631 Patent 2:46-51.

Additionally, the applications for both the '441 Patent and the '631 Patent carried over claim language from the application for the '565 Patent that recited the clip with reference to "an opening" and "an interior space." Independent Claim 11 of the '441 Patent, for example, recites "at least one clip including inward facing ends disposed on each side of an opening." '441 Patent 4:34-42. In another patent

[6] Generally, the patents disclose different looms and templates, but share the same disclosure of a clip.

infringement case filed in this District, Choon's Design alleged that Tristar Products, Inc. infringed Claim 11 of the '441 Patent in connection with sales of loom kits with S-Clips. *Choon's Design, Inc. v. Tristar Prods., Inc.*, No. 2:14-cv-10848 (E.D. Mich. filed Feb. 24, 2014) (Roberts, J.) (hereinafter, "*Tristar*"). Ultimately, the *Tristar* Court granted Tristar Products' motion for summary judgment of non-infringement after construing "an opening" to mean "a single opening," such that the claim language "requires a single opening and inward facing ends disposed on each side of that opening."[7] *Tristar*, 2020 U.S. Dist. LEXIS 50106, at *13 (E.D. Mich. Mar. 23, 2020).

But in the '631 Patent, shortly after filing the patent infringement case against Tristar Products, Choon's Design amended Claim 10 during prosecution to eliminate the "single opening" limitation. Specifically, as presented in its April 21, 2014 Non-Final Office Action Response, Choon's Design amended the original versions of independent Claim 10 and dependent Claim 11 to recite:

> [**10**]. (CURRENTLY AMENDED) A kit for creating an item consisting of a series of links, the kit comprising:
>
> …
>
> at least one clip including inward facing ends ~~disposed on each side of an opening~~ for securing ends of the series of links together.

[7] The *Tristar* Court had previously rejected Tristar Products' proposed construction of "a c-shaped clip," but not, as Choon's Design represents, in connection with the instant term "clip including inward facing ends." The term at issue was "clip" alone, not "clip including inward facing ends." *Tristar*, 2016 U.S. Dist. LEXIS 53825, at *21-*22 (E.D. Mich. Apr. 21, 2016).

> [**11**]. (CURRENTLY AMENDED) The kit as recited in claim [**10**], wherein the clip comprises a C-shape and the inward facing ends extend in a direction perpendicular to ~~the~~ an opening.

ECF No. 126-5, PageID.4910. Accordingly, Choon's Design amended Claim 10 to remove "disposed on each side of an opening," leaving only the instant term "clip including inward facing ends," as well as the functional language "for securing ends of the series of links together." Likewise, Choon's Design amended Claim 11 for consistency with Claim 10 to replace "the opening" with "an opening."

Against this background, Choon's Design argues that "clip including inward facing ends" should be given its plain and ordinary meaning and construed to mean "connector with ends that face inward." Choon's Design argues that its proposed construction is consistent with the intrinsic evidence. For instance, Choon's Design argues that the amendment to eliminate the "single opening" limitation expresses the intention to broaden the scope of the original claim language. Moreover, Choon's Design points out that the '631 Patent introduces the disclosed clip as "the example clip" in the written description section, as set forth above. '631 Patent 2:46-47. Choon's Design argues that using the word "example" contemplates alternative designs in addition to the C-shaped design.

In their proposed constructions of "clip including inward facing ends," Defendants use slightly different wording, but agree on including some form of a

"single opening" limitation. Specifically, the First Group argues that the term should be construed to mean "a connector that has a pair of ends that point in the same direction, inwardly to a single open space defined in part by the pair of ends." Similarly, the Second Group argues that the term should be construed to mean "a connector having two ends, the ends substantially defining a single interior space between them," or "a clip having a single opening and inward facing ends disposed on each side of that opening." Defendants' basic contention is, first, that the term needs construction to clarify what the ends face inward to, and second, that recourse to the description of the clip in the written description section of the '631 Patent establishes that the ends face inward to the single interior space associated with the C-shaped design.

As explained below, the Court finds that "clip including inward facing ends" in Claim 10 of the '631 Patent should be construed to mean "connector with ends that face inward toward where ends of the series of links are kept."

As instructed by the Federal Circuit, the Court will begin its analysis by considering the claim language itself. The claim language does not recite the inward facing ends with reference to any single opening or single interior space. Nor does the claim language imply a C-shaped design. Rather, the claim language simply recites "at least one clip including inward facing ends for securing ends of

the series of links together." Accordingly, the claim language implies that the term should not be construed to impose a "single opening" limitation.

The Court also considers other intrinsic evidence associated with the claim language. As set forth above, during prosecution, Choon's Design amended Claim 10 to eliminate what was later construed by the *Tristar* Court as the "single opening" limitation. Specifically, Choon's Design amended Claim 10 to remove the claim language reciting that the inward facing ends are "disposed on each side of an opening," meaning a "single opening." The Court agrees with Choon's Design that the amendment expresses the intention to broaden the scope of the original claim language beyond clips with single openings. The Court also finds that the claim language as a whole is instructive. For instance, independent Claim 10 recites a "clip including inward facing ends," and dependent Claim 11 adds that "the clip comprises a C-shape." Accordingly, the claim language as a whole shows that the inward facing ends are an independent feature from the C-shaped design.

With respect to the claim structure, the Court notes that the parties dispute whether claim differentiation applies to counsel against imposing a "single opening" limitation. Under the doctrine of claim differentiation, there is "a presumption that differently worded claims cover different claim scope." *Wi-Lan USA, Inc. v. Apple Inc.*, 830 F.3d 1374, 1391 (Fed. Cir. 2016). The Federal Circuit has instructed that claim differentiation is a guide, not a rigid rule, and any

presumption created by claim differentiation is overcome by a contrary construction dictated by the patent and the prosecution history. *Id.* In the *Markman* briefs, the parties dispute whether "comprises a C-shape" and other claim language from dependent Claims 11 and 12 create a presumption that "clip including inward facing ends" in independent Claim 10 should not be construed to include a "single opening" limitation.

The Court need not rely on claim differentiation to inform the proper construction of the term "clip including inward facing ends." The Court is not faced with an analysis that turns on differences or possible differences between the scope of independent and dependent claims. What the Court finds important is, first, that Claim 10 recites the inward facing ends as an independent feature, and second, that the amendment to eliminate the "single opening" limitation expresses the intention to broaden the scope of the original claim language beyond clips with single openings.[8]

Next, the Court will consider other intrinsic evidence of record cited by the parties in support of their proposed constructions. In requesting that the Court construe the term "clip including inward facing ends" to include a "single opening"

[8] To address Choon's Design's main argument, the Court is not persuaded that the presumption applies with respect to some form of a "single opening" limitation in independent Claim 10 and the "C-shape" limitation in dependent Claim 11. While maintaining that all clips with single openings are C-Clips, Choon's Design is the one who originally presented an independent claim with the "single opening" limitation and a dependent claim with the "C-shape" limitation.

limitation, Defendants argue that their proposed construction would not improperly narrow the scope of the invention because the '631 Patent discloses only a single embodiment of a clip. On the other hand, Choon's Design points out that the claim language does not recite the inward facing ends with reference to any single opening associated with the C-shaped design. Choon's Design argues that it would be improper to limit the term unless the intrinsic evidence demonstrates that Choon's Design limited the invention to C-Clips. Among other reasons why there is no such limitation in this case, Choon's Design points out that the '631 Patent introduces the disclosed clip as "the example clip" in the written description section. As noted above, Choon's Design argues that using the word "example" contemplates alternative designs in addition to the C-shaped design.

Having considered the arguments of the parties, the Court finds that the fact that the '631 Patent discloses only a single embodiment of a clip does not support limiting the term "clip including inward facing ends" beyond the claim language itself. The Federal Circuit has instructed courts on "the twin axioms regarding the role of the specification in claim construction." *Liebel-Flarsheim Co. v. Medrad, Inc.,* 358 F.3d 898, 904 (Fed. Cir. 2004). "On the one hand, claims must be read in view of the specification, of which they are a part." *Id.* (quotation omitted). "On the other hand, it is improper to read a limitation from the specification into the claims." *Id.* As Defendants point out, the written description does not explicitly

describe alternative designs. However, the use of the word "example" offers at least some additional support showing that the inventor contemplated that the inward facing ends are applicable to alternative designs in addition to the C-shaped design.

As another avenue for obtaining a narrowing construction, Defendants cite the reexamination proceeding for the '631 Patent. According to Defendants, Choon's Design conceded in the reexamination proceeding that the clip is recited as a means-plus-function element. In addition to the more typical structural claim language, the Patent Act allows a patentee to draft claim elements in the "means-plus-function" format by expressing them "as a means or step for performing a specified function *without* the recital of structure, material, or acts in support thereof." 35 U.S.C. § 112(f) (emphasis added). Claim elements drafted in the means-plus-function format are "construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." *Id.* Here, if Choon's Design did, in fact, concede that the clip is recited as a means-plus-function element, then the scope of Claim 10 would be narrowed to the C-shaped design and its equivalents.

However, as Choon's Design points out, Defendants conflate means-plus-function elements with functional claim language. In the USPTO's May 7, 2024 Final Office Action, the Examiner agreed with Choon's Design that the functional

language "for securing ends of the series of links together" has "patentable weight." ECF No. 134-2, PageID.5247-5248. As explained by the Federal Circuit, the addition of functional language to "otherwise sufficiently definite structure" does not invoke the means-plus-function format. *Personalized Media Commc'ns, LLC v. Int'l Trade Comm'n*, 161 F.3d 696, 705 (Fed. Cir. 1998). Instead, functional language is given patentable weight because it "further narrows the scope of those structures covered by the claim and makes them more definite." *Id.*

Defendants also cite the prosecution history of the '565 Patent to argue that Choon's Design demonstrated an understanding that the invention is limited to a single opening. Specifically, Defendants point out that the claim language of a since cancelled claim in the application for the '565 Patent recited that the inward facing ends are "disposed on each side of an opening." According to Defendants, the claim language demonstrates an understanding that the invention is limited, or else Choon's Design would not have included limiting claim language.

The Court is not persuaded. Defendants' argument refers to the doctrine of prosecution disclaimer. "As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on definitive statements made during prosecution." *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003). When "the patentee has unequivocally disavowed a certain meaning to obtain his patent,

the doctrine of prosecution disclaimer attaches and narrows the ordinary meaning of the claim congruent with the scope of the surrender." *Id.*

Here, the doctrine of prosecution disclaimer does not apply for at least two reasons. First, Defendants have not cited any statements made by Choon's Design that constitute a disclaimer. All that happened is that Choon's Design presented claims with the "an opening" term that the *Tristar* Court later construed as imposing the "single opening" limitation. To the extent the claim language in the application for the '565 Patent can be read as demonstrating "how the inventor understood the invention," *Phillips*, 415 F.3d at 1317, merely presenting a claim with the "single opening" limitation does not rise to the level of making "definitive statements" showing that "the patentee has unequivocally disavowed a certain meaning to obtain his patent," *Omega Eng'g*, 334 F.3d at 1324.

Second, in the '631 Patent, Choon's Design amended Claim 10 to eliminate the "single opening" limitation. The Federal Circuit makes clear that when "the purported disclaimers are directed to specific claim terms that have been omitted or materially altered in subsequent applications (rather than to the invention itself), those disclaimers do not apply." *Saunders Grp., Inc. v. Comfortrac, Inc.*, 492 F.3d 1326, 1333 (Fed. Cir. 2007). As set forth above, the amendment expresses the intention to broaden the scope of the original claim language beyond clips with single openings.

As another reason for imposing a "single opening" limitation, Defendants point out that the Patent Act requires the specification of a patent to "conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. § 112(b). The statutory requirement of "particularity and distinctness" is known as the "definiteness" requirement. *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236-37 (1942). The Supreme Court has held that a claim of a patent is invalid as indefinite if, when "read in light of the specification … and the prosecution history," the claim "fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). The determination of indefiniteness is a legal conclusion drawn from a court's performance of its duty as the construer of claims. *Exxon Rsch. & Eng'g Co. v. United States*, 265 F.3d 1371, 1376 (Fed. Cir. 2001).

Here, Defendants argue that the term "clip including inward facing ends" renders Claim 10 invalid for indefiniteness because the claim language does not specify what the ends face inward to. In response, Choon's Design argues that Defendants abandoned an indefiniteness argument. Additionally, Choon's Design

argues that one would know how clips with inward facing ends can have ends that face inward toward themselves.[9]

The Court rejects Defendants' indefiniteness argument for two reasons. First, the Court agrees with Choon's Design that Defendants abandoned an indefiniteness argument. As Choon's Design explains, Defendants never served invalidity contentions. Pursuant to the Court's Scheduling Order for this case, Defendants were required to serve invalidity contentions to raise any grounds of invalidity under 35 U.S.C. § 112. ECF No. 114, PageID.4717.

Second, the Court finds that the term "clip including inward facing ends" does not render Claim 10 indefinite. In connection with specifying that the ends are "inward facing," Claim 10 recites both the structural limitations of a "clip" and its "ends," and the functional language explaining the capability of "securing ends of the series of links together." Given the simplicity of the technology and the disclosure of the clip in the '631 Patent, the Court finds that those skilled in the art would understand the concept of inward facing ends outside the context of the single interior space associated with the C-shaped design.

Having addressed the numerous arguments of the parties for and against imposing some form of a "single opening" limitation, the Court turns to the issue

[9] Choon's Design also explains that neither the USPTO nor any third party challenger has ever raised the issue of indefiniteness.

of whether the term "clip including inward facing ends" needs construction to clarify what the ends face inward to. At first glance, the conflict that arises when attempting a clarifying construction is: (a) the '631 Patent describes the inward facing ends with reference to the single interior space associated with the C-shaped design; but (b) the claim language and the prosecution history demonstrate that the term should not be construed to impose a "single opening" limitation. Defendants appear to assume that the Court is in a grammatical bind where the only way to elaborate on the concept of inward facing ends is using "an interior space" or "an opening," meaning a "single interior space" or a "single opening."

But the written description and figures offer guidance. With reference to Figures 7 and 8, reproduced above, the written description describes that the interior space (50) toward which the inward facing ends (48) face is simply "where parts of the elastic members are kept." '631 Patent 2:46-51. The Court finds that the language from the written description explains the concept of inward facing ends in a way that will be helpful to the jury and properly balances any perceived need for clarification with the scope dictated by the prosecution history. The Court therefore adopts the language from the written description for its construction of the term. Specifically, after revising the phrasing for consistency with the claim language as a whole, the Court finds that "clip including inward facing ends"

should be construed to mean "connector with ends that face inward toward where ends of the series of links are kept."[10]

### B. "Base End" (Claims 4 and 10)

| Disputed Term | Choon's Design's Proposed Construction | Defendants' Proposed Construction | Court's Construction |
|---|---|---|---|
| "base end" (Claims 4 and 10) | Plain and ordinary meaning, which is: "an end opposite the first end" | "the end of the base structure that is distally opposite the first end of the pin structure" | No construction necessary |

The parties request that the Court construe the term "base end" in Claims 4 and 10 of the '631 Patent. The term is directed to the template, and particularly to the pins and their bases. For reference, the term appears in the claim language reciting:

> **4**. The [*sic*] device for creating an item consisting of a series of links, the device comprising:
>
> a template including at least two pins spaced part [*sic*] from each other, each of the pins including a first end, a **base end**, and an access groove; and
>
> a bridge portion extending between the **base end** of each of the pins, wherein … each of the access grooves extend entirely through each of the pins including the first end and the **base end**.
>
> **10**. A kit for creating an item consisting of a series of links, the kit comprising:

[10] The parties agree on substituting the term "clip" with "connector," which was the construction adopted by the *Tristar* Court. *Tristar*, 2016 U.S. Dist. LEXIS 53825, at *22 (E.D. Mich. Apr. 21, 2016).

> a template including at least two pins spaced apart from each other, each of the pins including a first end, a **base end**, and an access groove; and
>
> … .

'631 Patent 4:1-11 (Claim 4) (emphasis added), 4:41-47 (Claim 10) (emphasis added). The dispute between the parties centers on Defendants' proposed construction, and concerns whether the term should be limited to distal ends and/or separately defined base structures.

Choon's Design argues that "base end" should be given its plain and ordinary meaning and construed to mean "an end opposite the first end." Similar to the "front end" or the "back end" of a car, Choon's Design reads "base end" as a directional indicator referring to the end of the pin adjacent the bridge portion. Choon's Design argues that its proposed construction is consistent with the description of both the template (12) and the template (15) in the '631 Patent. As to the pins (28A, 28B) in the template (12), Choon's Design points out that the bases (32A, 32B) are connected with the bridge (36), which in turn is opposite the flanges (30A, 30B). Similarly, as to the pins (21) in the template (15), Choon's Design points out that the base ends (27) are connected with the bridge portion, which in turn is opposite the first ends (23).

Defendants argue that "base end" should be construed to mean "the end of the base structure that is distally opposite the first end of the pin structure." Defendants read "base end" as a structural limitation whose plain and ordinary

meaning is "the end of the base." In other words, the term refers to the end of a base, which means that the pin necessarily has a base. Moreover, Defendants argue that the construction of the term should have two requirements, a "base structure" requirement for the base, and a "distally opposite" requirement for the end of the base. Defendants explain that the first requirement specifies that the pin must have a defined, separate, physical structure for a base, and that the second requirement specifies that the base must have a distal end opposite the first end of the pin.

Defendants argue that their proposed construction is consistent with the description of both the template (12) and the template (15) in the '631 Patent. With reference to annotated versions of Figures 4 and 10, reproduced below, Defendants point out that the pins have three features. ECF No. 139, PageID.5327-5328. Specifically, in the template (12), each pin (28A, 28B) includes a flange (30A, 30B), a base (32A, 32B), and an access groove (34A, 34B). Similarly, in the template (15), each pin (21) includes a first end (23), a base end (27), and an access groove (25). Defendants argue that the way the bases (32A, 32B) and the base ends (27) are illustrated in the figures show that both the pins (28A, 28B) in the template (12) and the pins (21) in the template (15) have a separate, physical structure defining a base. As an example application of their proposed construction, Defendants argue that, for the pins (28A, 28B) in the template (12), "base end" would refer to the ends of the bases (32A, 32B).

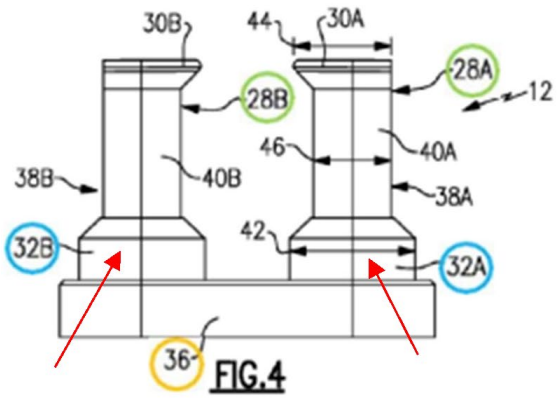



FIG.4


FIG.10

As explained below, the Court finds that "base end" in Claims 4 and 10 of the '631 Patent needs no construction and should be given its plain and ordinary meaning.

Studying the *Markman* briefs reveals that the dispute between the parties centers on Defendants' proposed construction. Specifically, Defendants argue that the construction of the term should have a "base structure" requirement for the base and a "distally opposite" requirement for the end of the base. However, the Court finds that the context in which the pins and their features are recited in the claims, shown in the figures, and described in the written description implies that the construction of the term "base end" should not limit the term to distal ends or separately defined base structures.

As an initial matter, with respect to a "distally opposite" requirement for the end of the base, Defendants' proposed construction follows from their reading of "base end" as meaning "the end of the base." In Claims 4 and 10, the claim language recites that each two-ended pin includes a "first end" and a "base end."

By contrast to the more generic "first end," Defendants have a point that "base end" implies that the pin has a base. However, in the context of the '631 Patent, "base end" refers to "the end that is the base," not "the end of the base."

The Court finds that "base end" does not refer to "the end of the base" for two reasons. First, while using "end" in connection with the pin, the claim language is drawn to features shown in the figures on upper and lower sections of the pins, not the very tops and bottoms of the pins. For example, according to the claim language of independent Claim 1 and dependent Claim 6, "the first end includes an outwardly extending flange" and "the base end includes a diameter greater than a diameter of the barrel portion." '631 Patent 3:57-63 (Claim 1), 4:14-16 (Claim 6). The claim language corresponds to the first and second embodiments of the template. As shown in Figure 4, reproduced above, in the template (12), the flanges (30A, 30B) and the bases (32A, 32B) of the pins (28A, 28B) are opposed about the barrel portions (40A, 40B). It can be seen that the flanges (30A, 30B) and the bases (32A, 32B) are on upper and lower sections of the pins (28A, 28B), not the distal ends of the pins (28A, 28B).

Second, limiting the term to distal ends would exclude the second embodiment of the template from claim language drawn to the bridge portion. For example, Claim 4 recites "a bridge portion extending between the base end of each of the pins." '631 Patent 4:1-11. As shown in Figure 9A, reproduced above, in the

template (12), the bridge does not extend between the distal ends of the bases of the pins (28A, 28B). Rather, the bridge is disposed between the pins (28A, 28B), and connected along the sides of the bases.

With respect to a "base structure" requirement for the base, Defendants appear to argue that the term "base end" is limited to the way the features of the pins are illustrated in the figures. For example, as to the pins (28A, 28B) in the template (12), as best understood by the Court, what Defendants appear to identify as a separate, physical structure defining a base is that the bases (32A, 32B) have greater diameters than the barrel portions (40A, 40B). However, as set forth above, these feature of the pins are recited elsewhere in the claim language as further limitations, implying that construing "base end" to impose a "base structure" requirement would improperly narrow the scope of the term.

Having rejected Defendants' proposed construction, studying the *Markman* briefs reveals that the term "base end" does not otherwise need construction. Accordingly, the Court finds that "base end" needs no construction and should be given its plain and ordinary meaning.

### C. "Bridge Portion" (Claim 4)

| Disputed Term | Choon's Design's Proposed Construction | Defendants' Proposed Construction | Court's Construction |
|---|---|---|---|

| | | | |
|---|---|---|---|
| "bridge portion" (Claim 4) | Plain and ordinary meaning, which is: "a portion that bridges the at least two pins by" extending between the base end of each of the pins | "the portion extending and maintaining uniform distance in between each of the base ends of the pin structures" | "a portion that bridges the at least two pins by" extending between the base end of each of the pins |

The parties request that the Court construe the term "bridge portion" in Claim 4 of the '631 Patent. For reference, the term appears in the context of claim language generally reciting a device comprising (a) a template and (b) a bridge portion:

> **4**. The [*sic*] device for creating an item consisting of a series of links, **the device comprising**:
> **a template** including at least two pins spaced part [*sic*] from each other, each of the pins including a first end, a base end, and an access groove; **and**
> **a bridge portion** extending between the base end of each of the pins … .

'631 Patent 4:1-11 (Claim 4) (emphasis added).

Choon's Design argues that "bridge portion" should be given its plain and ordinary meaning and construed to mean "a portion that bridges the at least two pins by" extending between the base end of each of the pins. Choon's Design argues that its proposed construction is consistent with the description of the template (12) in the '631 Patent. For instance, citing the written description corresponding to Figure 6, reproduced above, Choon's Design points out that the

pins (28A, 28B) are connected at the bases (32A, 32B) by the bridge (36), and the bridge (36) defines the distance (52) between the pins (28A, 28B). Choon's Design argues that its proposed construction fairly explains how the bridge portion serves as the part of the template that bridges the pins.

Defendants argue that "bridge portion" should be construed to mean "the portion extending and maintaining uniform distance in between each of the base ends of the pin structures." Defendants argue that their proposed construction is consistent with the description of the template (12) in the '631 Patent. With reference to Figure 6, reproduced above, Defendants point out that the bridge (36) defines the distance (52) between the pins (28A, 28B). Defendants maintain that, in all embodiments, the bridge portion maintains uniform distance between the pins, and that nothing in the '631 Patent indicates that it does not maintain uniform distance between the bases.

Defendants also argue that their proposed construction is consistent with the claim language. Defendants point out that the claim language does not explicitly recite that the template includes the bridge portion. Rather, the term appears as part of the overall claim language reciting a device comprising (a) a template and (b) a bridge portion. According to Defendants, this means that the claim language recites that the template, including the pins and the base ends, on the one hand, and the bridge portion, on the other hand, are separate structures.

Choon's Design disputes that that the template and the bridge portion are separate structures. Choon's Design also argues that Defendants' proposed construction is confusing and improperly imposes requirements that do not appear in the intrinsic evidence.

As explained below, the Court finds that "bridge portion" in Claim 4 of the '631 Patent should be construed to mean "a portion that bridges the at least two pins by" extending between the base end of each of the pins.

Initially, the parties extensively argue their dispute concerning whether the template and the bridge portion are separate structures. However, it is not entirely clear from the *Markman* briefs how this issue pertains to the proposed constructions the parties have offered to the Court. Specifically, neither the claim language, nor the proposed constructions offered by the parties, specifies whether or not the template and the bridge portion are separate structures.

To the extent the "pin structures" portion of Defendants' proposed construction is intended to impose a "separate structure" requirement, the Court rejects Defendants' proposed construction. As Defendants point out, the claim language does not explicitly recite that the template includes the bridge portion. However, it does not follow that the claim language recites that the template and the bridge portion are separate structures. To the extent the claim language can be read, in the context of the '631 Patent, as silent on this point, then it would not

place any limitation on whether the template and the bridge portion belong to the same part.

And in any event, it can be seen throughout the figures that both the template (12) and the template (15) are illustrated as a single handheld part that includes two spaced apart pins and a bridge portion. Likewise, in Figures 9A-9K, of which Figure 9A is reproduced above, the lines for reference number 12 assigned to the template variously point to the entire part, the pins (28A, 28B), and the bridge. And for the template (15), the written description makes clear that the "entire template 15 is a single part that is held during creation of the article." '631 Patent 3:35-36.

Additionally, the Court declines to adopt the "uniform distance" portion of Defendants' proposed construction. According to the claim language, the template includes two spaced apart pins, and the only limitation on the bridge portion is that it extends between the base ends of the pins. The claim language does not imply that the base ends of the pins are spaced apart by a uniform distance, let alone that the bridge portion must maintain such a uniform distance.

Having rejected Defendants' proposed construction, the Court finds that Choon's Design's proposed construction fairly describes the concept of a "bridge portion" in the '631 Patent in a way that will be helpful to the jury. Accordingly,

the Court adopts Choon's Design's proposed construction for its construction of the term.

### D. "Each of The Pins Including a First End, a Base End" (Claims 4 and 10)

| Disputed Term | Choon's Design's Proposed Construction | Defendants' Proposed Construction | Court's Construction |
|---|---|---|---|
| "each of the pins including a first end, a base end" (Claims 4 and 10) | plain and ordinary meaning, which is: "each of the pins includes a first end, and an end opposite the first end" | "the base ends of the respective pins are distinct and spaced, and do not converge to a single shared base end" | No construction necessary |

The parties request that the Court construe the term "each of the pins including a first end, a base end" in Claims 4 and 10 of the '631 Patent. For reference, in Claim 4, which is representative for purposes of discussion, the term appears in the claim language reciting:

> **4**. The [*sic*] device for creating an item consisting of a series of links, the device comprising:
>
> a template including at least two pins spaced part [*sic*] from each other, **each of the pins including a first end, a base end**, and an access groove; and
>
> … .

'631 Patent 4:1-11 (Claim 4) (emphasis added).

Choon's Design argues that "each of the pins including a first end, a base end" should be given its plain and ordinary meaning and construed to mean "each

of the pins includes a first end, and an end opposite the first end." Compared to the term itself, Choon's Design's proposed construction substitutes "base end" with its proposed construction of the term "base end." Correspondingly, Choon's Design states that its argument with respect to the term "base end" applies to the instant term, and does not argue that the instant term otherwise needs construction.

Defendants argue that "each of the pins including a first end, a base end" should be construed to mean "the base ends of the respective pins are distinct and spaced, and do not converge to a single shared base end." Defendants argue that their proposed construction follows from the claim language. Specifically, Defendants cite the "spaced apart" limitation to argue that the claim language requires that all parts of the pins, including the base ends, are spaced apart from each other. Conversely, Defendants maintain that nothing in the '631 Patent indicates that two pins can share a single base. Defendants also argue that their proposed construction is consistent with claim language drawn to the bridge portion. Specifically, Defendants argue that, if the base ends of the pins converged, then a bridge portion could not extend between them.

As explained below, the Court finds that "each of the pins including a first end, a base end" in Claims 4 and 10 of the '631 Patent needs no construction and should be given its plain and ordinary meaning.

As Defendants point out, the '631 Patent is directed to a template with two spaced apart pins. Correspondingly, Defendants do not identify any intrinsic evidence concerning the concept of pins with converging base ends. Instead, Defendants' proposed construction is tailored to excluding features of the accused Y-shaped mini-loom.

However, in explaining "its rule that claims may not be construed with reference to the accused device," the Federal Circuit makes clear that "a court may not use the accused product or process as a form of extrinsic evidence to supply limitations for patent claim language." *Wilson Sporting Goods*, 442 F.3d at 1330-31 (quotation omitted). "Thus, the rule forbids a court from tailoring a claim construction to fit the dimensions of the accused product or process and to reach a preconceived judgment of infringement or noninfringement. In other words, it forbids biasing the claim construction process to exclude or include specific features of the accused product or process." *Id.* at 1331.

Accordingly, finding nothing in the intrinsic evidence of record or the *Markman* briefs concerning the need for further construction, the Court preliminarily finds that "each of the pins including a first end, a base end" needs no construction and should be given its plain and ordinary meaning, while preserving the authority to modify its construction as the infringement and validity issues come before the Court. *Conoco, Inc. v. Energy & Envtl. Int'l, L.C.*, 460 F.3d 1349,

1359 (Fed. Cir. 2006) (recognizing that "a district court may engage in claim construction during various phases of litigation, not just in a *Markman* order").

### E. "Each of The Pins Including a First End, a Base End, and an Access Groove" (Claims 4 and 10)

| Disputed Term | Choon's Design's Proposed Construction | Defendants' Proposed Construction | Court's Construction |
|---|---|---|---|
| "each of the pins including a first end, a base end, and an access groove" (Claims 4 and 10) | Plain and ordinary meaning, which is: "each of the pins includes a first end, an end opposite the first end, and a groove" | "each of the pins has its own access groove; that is, the access grooves of each of the pins are distinct and separated from one another" | No construction necessary |

The parties request that the Court construe the term "each of the pins including a first end, a base end, and an access groove" in Claims 4 and 10 of the '631 Patent. For reference, in Claim 4, which is representative for purposes of discussion, the term appears in the claim language reciting:

> **4**. The [*sic*] device for creating an item consisting of a series of links, the device comprising:
>
> a template including at least two pins spaced part [*sic*] from each other, **each of the pins including a first end, a base end, and an access groove**; and
>
> … .

'631 Patent 4:1-11 (Claim 4) (emphasis added).

Choon's Design argues that "each of the pins including a first end, a base end, and an access groove" should be given its plain and ordinary meaning and construed to mean "each of the pins includes a first end, an end opposite the first end, and a groove." Compared to the term itself, Choon's Design's proposed construction substitutes "base end" with its proposed construction of the term "base end." Correspondingly, Choon's Design states that its argument with respect to the term "base end" applies to the instant term, and does not argue that the instant term otherwise needs construction.

Defendants argue that "each of the pins including a first end, a base end, and an access groove" should be construed to mean "each of the pins has its own access groove; that is, the access grooves of each of the pins are distinct and separated from one another." Defendants argue that their proposed construction follows from the claim language. Specifically, Defendants cite the "spaced apart" limitation to argue that the claim language requires that all parts of the pins, including the access grooves, are spaced apart from each other. Conversely, Defendants maintain that nothing in the '631 Patent indicates that two pins can have access grooves that connect with one another.

As explained below, the Court finds that "each of the pins including a first end, a base end, and an access groove" in Claims 4 and 10 of the '631 Patent needs no construction and should be given its plain and ordinary meaning.

Once again, Defendants do not identify any intrinsic evidence concerning the concept of pins whose access grooves connect with one another, and instead, their proposed construction is tailored to excluding features of the accused Y-shaped mini-loom. Accordingly, finding nothing in the intrinsic evidence of record or the *Markman* briefs concerning the need for further construction, the Court preliminarily finds that "each of the pins including a first end, a base end, and an access groove" needs no construction and should be given its plain and ordinary meaning, while preserving the authority to modify its construction as the infringement and validity issues properly come before the Court.

## IV. CONCLUSION

The Court construes the disputed claim terms as set forth above. Specifically, the Court finds that:

- "clip including inward facing ends" in Claim 10 of the '631 Patent should be construed to mean "connector with ends that face inward toward where ends of the series of links are kept";
- "base end" in Claims 4 and 10 of the '631 Patent needs no construction and should be given its plain and ordinary meaning;
- "bridge portion" in Claim 4 of the '631 Patent should be construed to mean "a portion that bridges the at least two pins by" extending between the base end of each of the pins;

- "each of the pins including a first end, a base end" in Claims 4 and 10 of the '631 Patent needs no construction and should be given its plain and ordinary meaning; and
- "each of the pins including a first end, a base end, and an access groove" in Claims 4 and 10 of the '631 Patent needs no construction and should be given its plain and ordinary meaning.

The Court reserves the authority to modify its claim constructions as the infringement and validity issues of the '631 Patent come before the Court.

**SO ORDERED**.

Date: February 7, 2025

s/F. Kay Behm
F. Kay Behm
United States District Judge